

Melick, et al.

Attorney Docket No. P04409US01

REMARKS**OVERVIEW**

Claims 1-4, 19, 21-31, 38-50 and 57 are pending in this application. Previously withdrawn Claims 5-18, 20, 32-37 and 51-56 are now cancelled. Claims 29, 44, and 48 have also been cancelled. Claims 58-61 are new. The present response is an earnest effort to place the case in proper form for allowance. Reconsideration and passage to issuance are therefore respectfully requested.

ISSUES REGARDING DRAWINGS

The Examiner has required the Applicant to furnish drawings under 37 C.F.R. § 1.81. Therefore, the Applicant submits a proposed informal drawing for Figure 1. Proposed Figure 1 illustrates the "transmitter." Therefore it is respectfully requested that this issue has been remedied.

ISSUES UNDER 35 U.S.C. § 112

Claims 28-31 and 47-50 have been rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement. In particular, the Examiner indicates that the "Specification does not clearly describe about transforming the bits of data into transmission pulse of electrical energy, or pulse of light, wherein the transmission pulse having a pulse position selected from a set of three or more predetermined pulse positions, one of which corresponds to the bits of data" (Office Action, page 3, numbered paragraph 4). This rejection is respectfully traversed.

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In particular, the Examiner is directed towards Chart 8 of the specification, which, for example, indicates ten separate pulse start times (and therefore pulse positions) where each of the pulse positions is associated with a different number (each number corresponding with bits of data). Thus, it is clear from the specification as to how to make and use the present invention and this rejection must be withdrawn.

Claims 28-31, 44, and 47-50 have been rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. This rejection is respectfully traversed.

With respect to claims 28 and 47, the Examiner believes it is unclear what the term "pulse position" selected from "a set of three or more predetermined pulse positions" indicates. The pulse position indicates where in time a pulse is located. Chart 8 of the Specification indicates how different symbols can be represented by positioning pulses at different points in time. Therefore, it is respectfully submitted that these rejections should be withdrawn.

With respect to claims 29, 44, and 48, the Examiner indicates that the term "a number base higher than 2" is not understood. The Applicants submit that the meaning of this phrase is quite clear. If the pulse characteristic is a pulse position, then there are three or more different pulse positions. In a base 3 system, there would be three different pulse positions. In a base 4 system, there would be four different pulse positions. In a base 10 system there would be 10 different pulse positions. Thus, the number base system used corresponds to the number pulse positions used. Nevertheless, these claims have been cancelled, thereby mooted these rejections.

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ISSUES UNDER 35 U.S.C. § 102

Claims 1-4, 19, 21-28, 30-31, 38-43, 45-47, 49-50, and 57 have been rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,050,189 to Cox et al. Not only does Cox fail to anticipate these claims, but Cox would appear to be largely irrelevant to the claimed invention when the claims are reasonably construed. Thus, these rejections are respectfully traversed.

Cox is directed towards a transceiver for a LAN. Cox discloses converting a multiple bit digital input signal into a pulse-like analog signal which is amplitude and phase modulated (Abstract). Note particularly that Cox's analog signal is a continuous signal which is clear from Figures 2 and 10. Therefore, to the extent that Cox is considered to show pulses, it must be understood that the pulses of Cox are a part of a continuous signal. Claims 1-4, 19, 21-28, 30-31, 38-43, 45-47, 49-50, and 57 all require a "transmission pulse" or "transmission pulses". What are referred to as pulses in Cox et al. are not "transmission pulses" as claimed because the pulses of Cox et al. are part of a continuous signal. A "transmission pulse" by definition is not a part of a continuous signal. The term "transmission pulse" makes clear that the transmission is pulsed as opposed to being a continuous transmission. As Cox does not disclose "transmission pulses" these rejections must all be withdrawn.

NEW CLAIMS

Claims 58 to 61 have been added to further particularly point and distinctly claim the invention. These claims specifically require the pulses to be "time modulated ultrawideband" pulses. Support for this limitation is found throughout the specification, including at least at paragraph [0064].

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CONCLUSION

No fees or extensions of time are believed to be due in connection with this amendment; however, consider this a request for any extension inadvertently omitted, and charge any additional fees to Deposit Account No. 26-0084.

Reconsideration and allowance is respectfully requested.

Respectfully submitted,

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